Q51098 PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Shingo NISHIKAWA, et al.

Appln. No.: 09/116,589

Filed: July 16, 1998



Group Art Unit: 2872

Examiner: A. Chang

REFLECTION TYPE DIFFUSE HOLOGRAM, HOLOGRAM FOR REFLECTION HOLOGRAM For:

COLOR FILTERS, ETC., AND REFLECTION TYPE DISPLAY DEVICE USING SUCH

HOLOGRAMS

REQUEST FOR CORRECTED OFFICIAL FILING RECEIPT

ATTN: APPLICATION BRANCH **Assistant Commissioner for Patents** Washington, D.C. 20231

Sir:

We enclose a copy of the Official Filing Receipt for the above-identified application and request the following corrections:

- Under "ATTORNEY DOCKET NO." please insert -- Q51098--
- Under "FOREIGN APPLICATIONS" please insert -- JAPAN 9-190970 07/16/97--

Verification for the requested corrections is indicated on the original Declaration and Power of Attorney filed January 13, 1999.

These errors were caused by the PTO and therefore no fee is necessary.

Respectfully submitted,

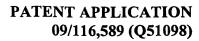
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 Pennsylvania Avenue, N.W. Washington, D.C. 20037-3213

Telephone: (202) 293-7060 Facsimile: (202) 293-7860

Date: September 3, 1999

Peter A. McKenna

Registration No. 38,551



ABSTRACT

A method of fabricating a hologram having a pattern made up of pixels in which a photosensitive material for forming a hologram is stacked on either a reflection-type hologram or a transmission type hologram. According to one aspect of the invention, the photosensitive material is stacked on a reflection-type relief hologram and reconstructing illumination light of a given wavelength is struck on the reflection-type relief hologram through the photosensitive material, so that interference fringes produced by interference of the light diffracted from the reflection type relief hologram and the incident light are recorded in the photosensitive material. According to another aspect of the invention, the photosensitive material is stacked on a transmission-type hologram, and reconstructing illumination light of a given wavelength is struck on a side of the transmission type hologram that is not opposite to the volume hologram photosensitive material, so that interference fringes produced by interference of light diffracted from the transmission type hologram and reference light incident on the photosensitive material are recorded in the photosensitive material. According to a third aspect of the invention, the photosensitive material is stacked on a transmission type hologram, and reconstructing illumination light of a given wavelength is struck on a side of the transmission type hologram that is not opposite to the photosensitive material, so that interference fringes produced by interference of light diffracted from the transmission type hologram and zero-order transmitted light are recorded in the photosensitive material, and a reflecting layer is provided on a back side of the photosensitive material.

FILING RECEIPT

CORRECTED



UNITED STATES EMARTMENT OF COMMERCE Patent and Trademark Office ASSISTANT SECRETARY AND COMM OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APPLICATION NUMBER FILING DATE	GRP ART UNIT	FIL FEE REC'D ATTORNEY DOCKET NO.	DRWGS	TOT CL	IND CI
09/116,589 07/16/98		\$3,910.00 Q51098-		84	19

SUGHRUE MION ZINN MACPEAK & SEAS 2100 PENNSYLVANIA AVENUE N W WASHINGTON DC 20037-3202



Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Application Processing Division's Customer Correction Branch within 10 days of receipt. Please provide a copy of the Filing Receipt with the changes noted thereon.

Applicant(s)

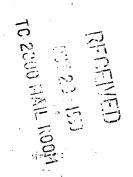
SHINGO NISHIKAWA, TOKYO, JAPAN, KENJI UEDA, TOKYO, JAPAN, TOSHIKAZU SEGAWAY TOKYO, JAPAN, TSUYOSHI HOTTA, TOKYO, JAPAN, YUKO KUWABARA, TOKYO, JAPAN, MASACHIKA WATANABE; TOKYO, JAPAN 🗸

CONTINUING DATA AS CLAIMED BY APPLICANT-THIS APPLN IS A CIP OF 08/839,666 04/15/97

FOREIGN APPLICATIONS-	JAPAN - PAN - JAPAN - JAPAN -	092518/1996
	JAPAN	9-19-0970 07/16/97-

REFLECTION TYPE DIFFUSE HOLOGRAM, HOLOGRAM FOR REFLECTION HOLOGRAM COLOR FILTERS, ETC., AND REFLECTION TYPE DISPLAY DEVICE USING SUCH HOLOGRAMS

PRELIMINARY CLASS: 359



DATA ENTRY BY: THOMAS, SHEILA

TEAM: 06 DATE: 02/09/99

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O9/116,589	SERIAL NUMBER		FILING DATE	CLASS	GRO	UP ART UNIT	ATTORNEY DO	CKET NO.
SHINGO NISHIRAMA, TOKYO, JAPAN; KENJI UEDA, TOKYO, JAPAN; TOSHIKAZU SEGAMA, TOKYO, JAPAN; TEUKOSHI HOTTA, TOKYO, JAPAN; YUKO KUWABARA, TOKYO, JAPAN; MASACHIKA WATANABE, TOKYO, JAPAN. ***CONTINUING DOMESTIC DATA***********************************	09/116,58	9	07/16/98	359		2872	i e	
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日本国特許庁

PATENT OFFICE
JAPANESE GOVERNMENT



別紙添付の書類に記載されている事項は下記の出願書類に記載される事項と同一であることを証明する。

This is to certify that the annexed is a true copy of the following application as filed th this Office.

出願年月日 ate of Application:

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1996年 4月15日

願番号 plication Number:

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平成 8年特許願第092518号

願 licant (s):

大日本印刷株式会社

1997年 5月 2日



PATENT OFFICE
JAPANESE GOVERNMENT

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This is to certify that the annexed is a true copy of the following application as filed this Office.

以願年月日 te of Application:

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1996年 5月17日

願番号 plication Number:

平成 8年特許願第123390号

願 人 Cicant (s):

大日本印刷株式会社

1997年 5月 2日



PATENT OFFICE
JAPANESE GOVERNMENT

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願年月日

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1996年 7月22日

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lication Number:

平成 8年特許願第192020号

願 人 Ecant (s):

大日本印刷株式会社

1997年 5月 2日



PATENT OFFICE JAPANESE GOVERNMENT

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This is to certify that the annexed is a true copy of the following application as filed 1 this Office.

引願年月日 ate of Application:

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1996年 7月26日

願 番 号 plication Number:

平成 8年特許願第197574号

顧 人 icant (s):

大日本印刷株式会社

1997年 5月 2日



PATENT OFFICE JAPANESE GOVERNMENT

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This is to certify that the annexed is a true copy of the following application as filed h this Office.

引願年月日 ite of Application:

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1996年 9月 9日

願番号 plication Number:

平成 8年特許願第237857号

願 人 icant (s):

大日本印刷株式会社

1997年 5月 2日

